

REMARKS

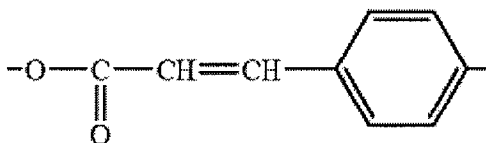
By way of summary, Claims 1-12 were pending prior to the entry of this paper. Claims 1-8 were previously withdrawn. Claims 9 and 12 are amended herein as presented above. Thus Claims 1-12 remain pending.

Rejections under 35 USC § 102

The Office Action rejects Claims 9 and 12 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,144,464 to Ohnishi et. al. Applicant respectfully disagrees with the rejection. Nevertheless, to expedite prosecution, Applicant has amended Claim 9 to recite:

Polymer liquid crystal fine particles characterized by being transparent fine particles of 0.5 to 10 μm in average particle size which are made of a high-molecular liquid crystal compound containing liquid crystal mesogens and a cinnamoyl group whose molecules have been oriented via application of heat or light or both.

Ohnishi does not disclose or even remotely suggest a “high-molecular liquid crystal compound containing liquid crystal mesogens and a cinnamoyl group” as recited by Claim 9. Accordingly, Claim 9 as amended is novel over Ohnishi. The cinnamoyl group has the following structure:



Claim 12 is amended to recite compounds including the structure of the cinnamoyl group shown above to be in accordance with Claim 9 as amended. Thus, Claim 12 as amended is also novel over Ohnishi for at least the same reasons discussed above.

Rejections under 35 USC § 103

The Office Action rejects Claims 10 and 11 under 35 U.S.C. §103(a) as being unpatentable over Ohnishi. The Office Action recognizes that Ohnishi does not teach that the polymer liquid crystal fine particles have a spherical shape and that the weight average molecular weight is in a range from 5000 to 1,000,000. However, the Office Action states that it would be obvious to one having ordinary skill in the art to optimize the shape of the fine particles and the

weight average molecular weight of the particle. Applicant respectfully disagrees with the Office Action.

The examples of the polymer liquid crystal disclosed by Ohnishi do not include the cinnamoyl group or a structure similar to the cinnamoyl group. Thus, Claim 9 as amended is not only novel over Ohnishi but also non-obvious in view of Ohnishi. Claims 10 and 11 depend from Claim 9 and include all the limitations recited by Claim 9 and also recite unique combinations of additional features not taught or suggested by Ohnishi. Thus, contrary to the Office Action Claims 10 and 11 are not obvious in view Ohnishi.

Moreover, as described in paragraph [0023] of the specification as filed, when light is initially irradiated onto a high-molecular liquid crystal compound having mesogens and a cinnamoyl group, the mesogens aligned in the direction roughly corresponding to the direction of the electric field vector of the irradiated light are fixed by the optical dimerization reaction of the cinnamoyl groups. When the high-molecular liquid crystal compound containing mesogen and a cinnamoyl group is subsequently heated, the remaining non-fixed mesogens move actively and become oriented in accordance with the fixed mesogens.

This is one of the properties of the high-molecular liquid crystal compound containing liquid crystal mesogen and a cinnamoyl group that makes it possible to provide polymer liquid crystal fine particles which are used for an optical film that can be suitably used for antiglare treatment by suppressing blurry image and reduced contrast while preventing unwanted reflection of external light as described in paragraph [0007] of the specification as filed. Applicant submits that these effects are at least supported by the comparisons between Examples and Comparative Examples shown in Fig. 1, Table 1 and their corresponding description in the specification as filed.

Applicant submits that nothing in Ohnishi suggests the above discussed advantages of a high-molecular liquid crystal compound having liquid crystal mesogen and a cinnamoyl group. Thus, the features disclosed in Claims 10 and 11 would not be obvious to a person having ordinary skill in the art in view of Ohnishi. In view of the above discussion, Applicant requests the Examiner to withdraw the rejections to Claims 10 and 11 and allow them to issue.

Application No.: 10/598,923
Filing Date: September 14, 2006

No Disclaimers or Disavowals


Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 25, 2009

By: 
Karoline A. Delaney
Registration No. 44,058
Attorney of Record
Customer No. 20995
(949) 760-0404

AMEND

6830299
031809